

ABSTRACT OF THE DISCLOSURE

A stage apparatus including a center slider movable in XY directions and a substrate stage mounted on the center slider. The center slider and the 5 substrate stage are connected by plural electromagnet units to generate a moving force in a predetermined direction to the substrate stage by application of electric current to exciting coils. A moving force to be applied to the substrate stage and its direction are 10 determined in correspondence with movement of the slider, and an electric current is selectively applied to the exciting coils of said plural electromagnet units. Upon application of electric current to the respective exciting coils, the directions of the 15 electric current applied to the respective exciting coils are selected so as to reduce a leak magnetic field around a wafer on the substrate stage.